REMARKS

Applicant acknowledges the First Action of 22 SEP. 2008 and request reconsideration of the claims as amended. Main apparatus claim 1 has been amended to be generally consistent with claim 1 of Applicant's corresponding European application **EP 1 683 259** (front page published 26 JUL. 2006 in the EPO Patentblatt 2006/30). Former claims 2-11 have been cancelled, without prejudice.

Amended main apparatus claim 1 has been drafted on the basis of figure 2 and the disclosure in paragraphs 0017-0020, 0023 and 0026-0028. New claim 12 has been drafted on the basis of original claim 1 and the disclosure in paragraphs 0023 and 0029. New claim 13 has been drafted on the basis of original claim 2 and the disclosure in paragraph 0020. New claim 14 has been drafted on the basis of original claim 4 and the disclosure in paragraph 0020, in view of figure 1. New claim 15 has been drafted on the basis of original claim 5 and the disclosure in paragraph 0026. New claims 16 to 18 have been drafted on the basis of the disclosure in paragraphs 0026 to 0028. New claim 19 has been drafted on the basis of figures 1 and 2 and the disclosure in paragraphs 0017 and 0020. New claim 20 has been drafted on the basis of the disclosure in paragraph 0026.

New method claims 21 to 23 are method claims that correspond respectively to apparatus claims 1, 12 and 13, and new claim 24 is a *method* claim that corresponds to new *apparatus* claim 18.

INDEPENDENT APPARATUS CLAIM 1, AS AMENDED

Independent claim 1 refers to an electronically commutated motor having a permanent-magnet rotor and a stator, which stator comprises at least one stator winding. The current in that stator winding is switched ON and OFF using at least one commutation signal generated by a microcontroller. At least one second signal 51 is generated by a device 36 which is configured to influence the magnitude of the current that flows, during operation, through the stator winding, when and if that winding is switched on by the commutation signal.

The electronically commutated motor according to claim 1 further comprises a first field-effect transistor (FET) to whose gate the commutation signal is supplied via a voltage divider. A resistance of this voltage divider is arranged in-between the gate and a point having a predetermined electrical potential. A second field-effect transistor is arranged in-between the source of the first field-effect transistor and the point having the predetermined electrical potential. The second signal is applied to the gate of this second field-effect transistor for modifying the voltage drop at the second field-effect transistor dependent on that second signal. Thus, the pinch-off voltage of the first field-effect transistor is influenced.

ART REJECTION

Cited prior art reference BERROTH (commonly assigned with this case)

BERROTH is directed to an electronically commutated motor having a permanent-magnet rotor 22 and a stator with two stator windings 24, 26 that are connected to transistors (cp. BERROTH, paragraph 0025 and 0029). In figure 1 of BERROTH, these transistors are MOSFET transistors 30, 32 with source terminals S that are connected via a node 34 to ground 38 (cp. BERROTH, paragraph 0029). In figures 4 and 6 of BERROTH, the transistors are NPN bipolar transistors 30, 32 with emitters that are connected via a node 34 and a shared emitter resistor 36 (also referred to as "measuring resistor") to ground 38 (cp. BERROTH, paragraph 0037). The base terminals of the NPN bipolar transistors 30, 32 are connected via diodes 54, 56 and a node 50 to the collector of an NPN bipolar transistor 58, whose emitter is connected to ground 38 (cp. BERROTH, paragraph 0039).

According to BERROTH, paragraph 0040, the transistors 30, 32 are operated in the so-called linear regions, i.e. as variable resistors, and a portion of their base current is taken away from them by transistor 58. Alternatively, when MOSFET transistors are used, a portion of the gate voltage is taken away from them.

By taking away a predefined portion of the base current of the transistors 30, 32, the magnitude of the current that flows during operation through the stator windings 24, 26 is influenced.

More specifically, an increase in motor current I, i.e. a rise in a voltage U_R at measuring resistor 36, causes transistor 58 to become more conductive and consequently causes a greater portion of the base current of transistors 30, 32 to flow through transistor 58 to ground 38, thus limiting high motor currents I to a setpoint value (cp. BERROTH, paragraph 0041).

DIFFERENCES BETWEEN BERROTH AND CLAIM 1, AS AMENDED

From the above description, it is clear that BERROTH does not describe an electronically commutated motor having all the features of new independent claim 1 as described above. More specifically, BERROTH neither discloses nor suggests an electronically commutated motor having a first field-effect transistor (FET) to whose gate a commutation signal is supplied via a voltage divider, wherein a resistance of that voltage divider is arranged in-between that gate and a point having a predetermined electrical potential. Furthermore, BERROTH neither discloses nor suggests an electronically commutated motor having a second field-effect transistor (FET) arranged in-between the source of the first field-effect transistor and the point having the predetermined electrical potential, and to whose gate a second signal is supplied for modifying the voltage drop at the second field-effect transistor dependent on that second signal in order to influence the pinch-off voltage of the first field-effect transistor.

It is particularly pointed out, that the transistors that are connected to the stator windings in the electronically commutated motor according to BERROTH are operated <u>in the linear region</u>, while the first field-effect transistor of the new claim 1 is operated <u>in the pinch-off region</u>, for the purpose of achieving a <u>low-noise</u> commutation.

CONCLUSION

BERROTH (now USP 6,995,534, our docket 870-3-154) neither discloses nor suggests the subject matter of main apparatus claim 1, nor the subject matter of main method claim 21. Claims 1 and 21 are clearly novel and inventive over the work of Applicant's colleague and co-worker BERROTH. New dependent claims 12-20 incorporate the features of claim 1, as amended. New dependent claims 22-24 incorporate the features of main method claim 21. Therefore, all the claims are in condition for allowance.

The cancellation of former claims 2-11 means that NO additional claims fees are generated by the addition of new claims 12-24. The total number of independent claims is two, within the limit of three.

Submitted herewith is a Petition for Two-Month Extension, with authorization to charge fees to Deposit Account 50-4732.

Please also charge any fee deficiency to Deposit Account 50-4732.

If Examiner Leykin detects any remaining informalities, or wishes to make any suggestions to place the application in condition for allowance, she is invited to telephone the undersigned at 781-910-9664 (MOBILE) or 774-521-3057 (LANDLINE).

Respectfully submitted,

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